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F O R T U N E S W A S H E D A W A Y

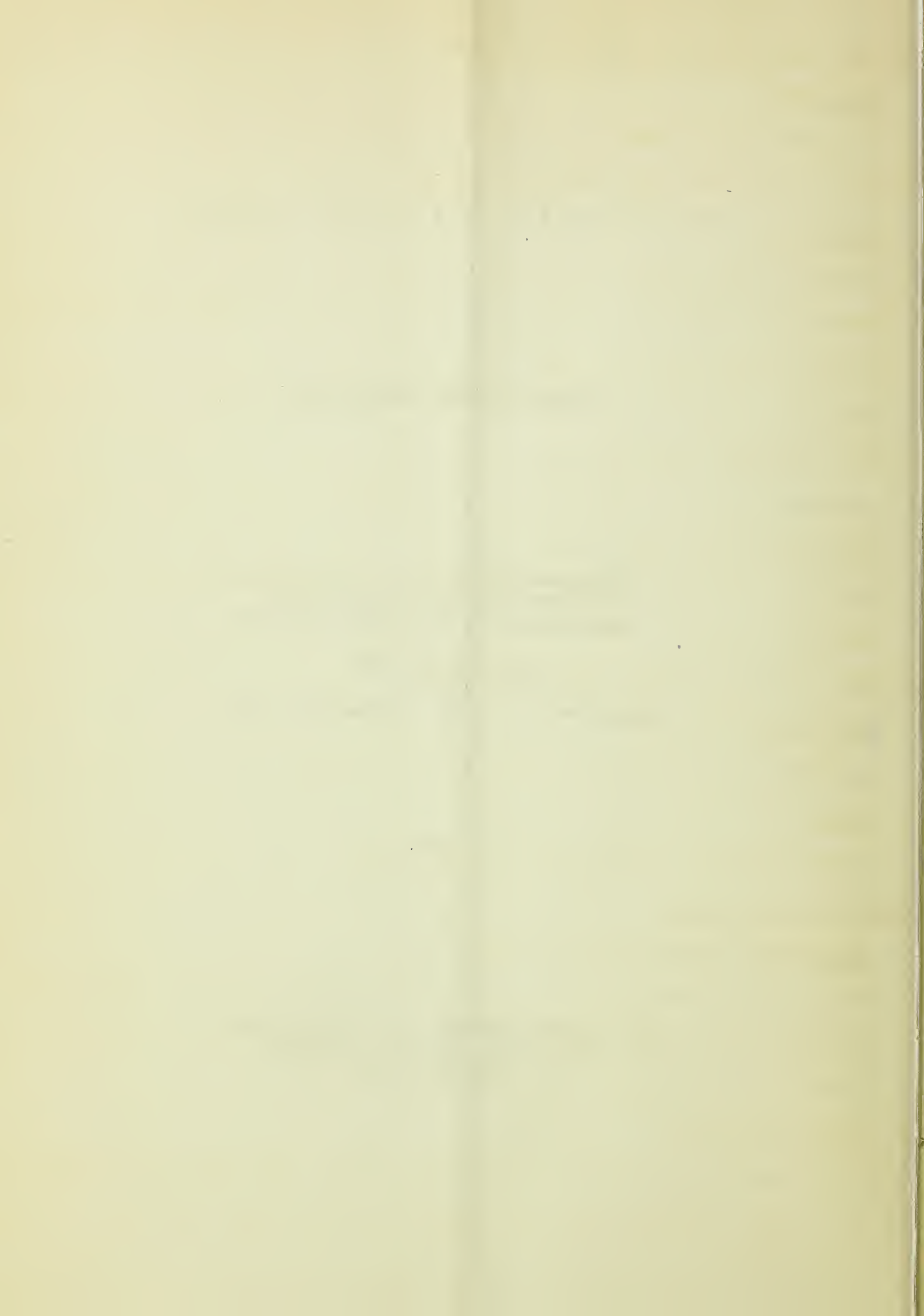
"AGRICULTURAL LIMESTONE"

Broadcast No. 32 in a series
of discussions of soil con-
servation in the Ohio Valley.

WLW, Cincinnati

December 3, 1938 6:00-6:15 p.m.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Dayton, Ohio



SOUND: Thunder, followed by rain...

ANNOUNCER

Fortunes Washed Away!

ORGAN: I GET THE BLUES WHEN IT RAINS.

ANNOUNCER

Although the practice of applying lime to increase crop yields was known three thousand years ago, it was slow to spread in the United States until recent years. Edmund Ruffin, a practical farmer of Virginia, was probably the first man in this country to test soils for acidity. But the tremendous increase in the application of agricultural limestone in the past decade has been due to the experiences of such farmers as Arthur Gore, of Lawrence County, Indiana. And this story comes from Lawrence County, one of the nation's greatest limestone centers...

SOUND: Team of horses pulling wagon.

ARMSTRONG (off mike)

...what in tarnation are you up to, Arthur?

GORE

Good afternoon, Armstrong. Whoa, now.

SOUND: Team stops.

ARMSTRONG (coming up to wagon)

Well, now, Arthur, you've been a good friend of mine, ever since you came out here. Would you be so good as to tell me what that stuff is that you're hauling in that wagon?

GORE (laughing)

Why, Armstrong, that's agricultural lime. I'm going to spread it over some of my alfalfa and sweet clover fields, just to see what it'll do.



ARMSTRONG

So that's what it is. I've heard tell about agricultural lime, but that's the first I ever did see. Where'd you get on to it?

GORE

Oh, I don't remember right now just where I first heard about it, but lately I've been reading right smart about it in some of the farm papers and bulletins.

ARMSTRONG

Well, it may be all right, but look's like that's throwing a lot of money out on the ground--for nothing, maybe.

GORE

Not so much, and I figger it'll pay its own way. Them Voorhies twins, Jack and Billy I think the names are, are going to come over in the morning and spread it. You remember my alfalfa, Armstrong?

ARMSTRONG

Yes, that 3-acre patch by the road that you planted last year.

GORE

That's the one. It's sorta yellow, and didn't do so good. I figger that the soil's too sour, so I'm going to top dress it with this lime.

ARMSTRONG

But why fool with alfalfa in the first place?

GORE

Because most of my farm's too rolling for anything but meadow and pasture. Now you take that alfalfa field. The man before me abused it right smart, and it was all cut up with gullies when I bought the place.



ARMSTRONG

Yes, I remember how you plowed in the banks and seeded them.

GORE

But if I try to grow corn on that field, I'll have the gullies all over again. Nope, my land is going to pasture and meadow, and I remember quite well what one of those bulletins said: One of the first essentials is liming.

ORGAN: I'M LOOKING OVER A FOUR LEAF CLOVER.

SOUND: Clinking of dishes being washed.

GORE

Oh, the mailman just stopped down at the box, Alice. Guess I'll go see what it is.

ALICE

Well, for goodness sakes, take Jack with you. He's been driving me crazy all morning.

GORE

All right. Come on, Jack, let's go get the mail.

SOUND: Door opens and closes. Dog barks as he scampers along.

GORE

Nice to be out, isn't it, old boy...even if it is a bit wet. Well, we sure needed this rain. The pastures were mighty brown...and old man Gore is mighty glad he has grass on those slopes, because this rain was a gully-washer.

SOUND: Dog barks.

GORE

Well, here we are. Let's see what we can find.

SOUND: Creaking of mailbox being opened and closed.



GORE

Oh, that...and, hmm...come on, Jack....oh, here's one from the university...

SOUND: Door opens and closes.

ALICE

Anything for me, Arthur?

GORE

Yes, a letter from your sister and a catalog, or so...but I think you'll be interested in this letter from Purdue. You remember that limestone ledge I ran into down there by the creek?

ALICE

Yes, I've been wondering about that. As long as you've got limestone on the place, there's no use in hauling it eleven miles from Bedford. I'm glad you sent that sample to the university.

GORE

Well, let's see what it says.

SOUND: Letter being opened.

ALICE

Well, what is it? You know I'm as interested in this liming thing as you are.

GORE

Oh...let's see...here it says..."your sample of limestone which was forwarded to this office for analysis tested as follows.... neutralizing value, 98 percent." And over here under remarks they've got "very good." And it's signed by the state chemist.

ALICE

That's wonderful, Arthur! That'll mean that you can get a lot of your lime right here on the farm. You said you knew someone who would crush it for you.

GORE

Yeah, I can get that done all right. From the looks of that ledge, I can get hundreds of tons right here.

ALICE

And the nice thing about it is that you can lime your fields any-time in the year. You told me that when you were reading that first bulletin.

GORE

That's true, Alice. You know...I'm glad to see you so interested in all this.

ALICE

Why, darling...I'm interested in this farm just as much as you are. And it's remarkable how much you've done to the place in just a few years.

GORE

Well, there's no question about liming--it's a paying proposition. Now you take that sweet clover field. I limed half of it, and got a good stand.

ALICE

Yes, I know. The part that wasn't limed was mighty poor. That ought to show anybody that sour soils must be limed.

GORE

It ought to, but a lot of people think that just because this is limestone soil you don't need to lime it. You'll find that the soil will turn sour as quick as any. And I'm going to lime every crop and pasture field on this farm!

ORGAN: I'M LOOKING OVER A FOUR LEAF CLOVER.

ANNOUNCER

Walter Gore's interest in agricultural limestone continued to grow, and he did lime his fields--lime purchased from nearby Bedford plants, and lime quarried and pulverized on his own farm. And with his neighbor Armstrong, and Armstrong's son, now the county agent of Lawrence County...

SOUND: The following sequence takes place on board a train, as the rails click, whistles blow occasionally, etc.

CONDUCTOR

Tickets, please....Lafayette to Bedford....guess you've been up to the farmers' conference at Lafayette, eh...All right, thank you...(fading)...tickets, please...

ARMSTRONG

That was a good conference this year.

COUNTY AGENT

Yes, they're getting better every year, dad. And for one thing, Arthur, I noticed that you took particular interest in that session about soil conservation.

GORE

Yes, I did, Bill. You know that I'm strong on liming sour soils, and I don't want to spread a lot of lime and then see it wash away before it has a chance to work into the soil.

ARMSTRONG

I think I see your point, Arthur. You've decided long ago that your farm isn't fit for cultivation--that is, most of it--and so you're turning to beef cattle...and to raise beef cattle you've got to have productive pastures and meadows.



COUNTY AGENT

That's a good point, too. Too much of this land around Fayetteville is being cultivated, and too much of it is being cultivated up and down hill. Now, Gore here, has the right idea. He's pretty strong on permanent pastures in this locality.

ARMSTRONG

I know, but you can't build up soil fertility by keeping it in permanent pasture.

GORE

Well, I happen to know from experience that you can. Of course, they've got to have care.

COUNTY AGENT

Such as the care you're giving them. Let's see...you have four...

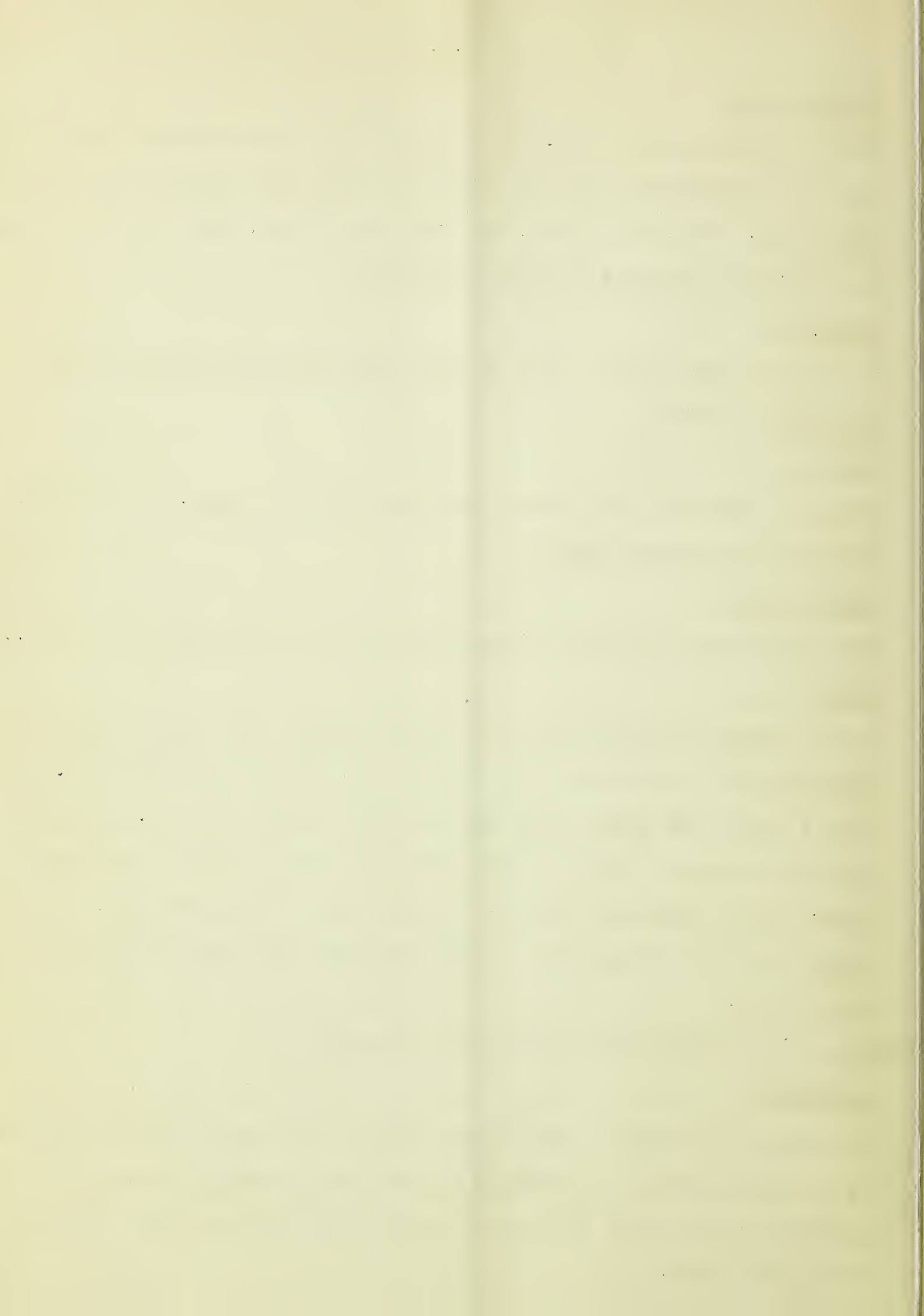
GORE

I have five permanent pastures, and I rotate the stock. That benefits the pasture and the stock, too. And it benefits me. When I bought my farm, even my brothers laughed at me...said I'd be dead and gone before I ever paid for that gullied, worn-out farm. But I limed my fields. I took care of my pastures. I took care of my crop lands...and gentlemen, my farm is taking care of me!

ORGAN: I'M LOOKING OVER A FOUR LEAF CLOVER.

ANNOUNCER

And now, once more we turn to the Soil Conservation Service of the U. S. Department of Agriculture, and here is Ewing Jones, who I imagine is all ready and eager to tell us the part lime plays in saving the soil.



JONES

Eager, but not ready, _____. We have a couple of visitors, and I'm going to turn that burden over to them.

ANNOUNCER

But surely you can offer us a bulletin on agricultural limestone?

JONES

No, no bulletin.

ANNOUNCER

Not even just one?

JONES

Well, under all this pressure, _____, I'll compromise. Not a bulletin on liming, but on its twin brother, legumes. This bulletin, "Legumes in Soil Conservation Practices," fits right in with the subject, because liming and legumes go hand in glove. Now, if you'll just read that sign in big bold letters.

ANNOUNCER

Copies of the bulletin on legumes may be secured by writing to Soil Conservation, Dayton, Ohio. That address again, is Soil Conservation, Dayton, Ohio.

JONES

Thank you, _____, for a job well done. And now let's get into this liming subject a little deeper. As I said, we have two august gentlemen. Here is R. H. Morrish, regional agronomist of the Soil Conservation Service, from Dayton, and J. M. Rudy, project agronomist from Bedford, Indiana. Hipe, before we go any farther, just what is an agronomist?



MORRISH

An agronomist, Ewing, is one who applies agronomic principles to the management of land. At least, that's what Webster says.

JONES

And agronomic principles...

MORRISH

Agronomy is the science that treats of the distribution and management of land. It comes from the Greek but, in plain English, it just means proper land management. And that's where liming comes in, because liming of acid soils is a part of good land management.

JONES

Well, I'm glad we have that settled. But, now, getting down to business, Hipe, as Mrs. Gore pointed out, fields can be limed at anytime during the year. Is that common, though?

MORRISH

No, it isn't. Most farmers apply their lime during the spring, just through custom. This often adds to the confusion of a busy season on the farm, and many times the lime isn't applied at all. A good many times the material can't be obtained on time, or rain delays the spring program, so that something must remain undone.

JONES

Then the apparent solution on a majority of farms is fall and winter liming.



MORRISH

That's right, and a good many farmers have begun to see that. You see, in the fall and winter dirt roads are always harder, drier, and less rutty than in the late winter and spring, and the materials can be hauled quicker and easier. In the same way, the fields are easier to travel over in the fall and winter, and less horse or tractor power is required to get the material on the field and to pull the spreader.

RUDY

Pardon me, but I'd like to add another point if I may.

JONES

Sure, Jim Rudy, come on in to this discussion. Mr. Morrish was about winded, anyhow.

MORRISH

I was not, but I'm glad that Jim can join us. After all, he's had plenty of experience in working with farmers over there in Indiana.

RUDY

Well, the point that I wanted to make was, that manufacturers can give quicker service in the fall and winter months. The peak demand for lime has always been in the spring when everyone wants it. This taxes the productive capacity of many lime plants, and frequently the purchaser is disappointed because he doesn't get his material on time.

MORRISH

That is a good point, and here's another: The farmer has more time. Of course, the farmer is always busy, but it's true that he does have more time in the fall and winter than he does in the spring.

JONES

I get it. He isn't trying to plant a crop before the next rain, and, in general, his whole schedule is more flexible. He can usually find some convenient time to do his liming. Now, Jim, what's your next contribution?

RUDY

Here's an important one. Lime has more time to act. When lime is applied in the fall or winter there is a period of two to six months during which the neutralizing process can partially take place. That's important when the next crop is to be an acid-sensitive one, such as a legume, and may mean the difference between success and failure. When application is made to meadow-land or pasture, the soil movement that results from the action of thawing and freezing helps to work the material down into the root zone. Well, that's a pretty long speech for me, so I'll just back away and say goodbye.

MORRISH

No, you don't, Jim. As long as you're in on this, you stay here and help out.

RUDY

There's just one more thing I'd like to say. M. O. Pence, extension agronomist of Purdue University, reports that one-half of the cropped land in Indiana is too acid for the regular growth of clovers or good pasture mixtures, and two-thirds of it too acid for satisfactory growth of alfalfa and sweet clover. And, he finds, Indiana farmers who do lime their fields more than get their money back in better production, and that certainly holds true of the Soil Conservation Service project in Lawrence County.



MORRISH

And we get the same report from D. R. Dodd, extension agronomist of the Ohio State University. At Farmers' Week last year, Dr. Dodd reported that the applications of lime on soils which need it are the most profitable investment an Ohio farmer can make. And carrying that a bit farther, in working with farmers in Ohio, Indiana, Kentucky, Tennessee, and Michigan, I've found, as Jim Rudy said, that it does pay to lime, and farmers who have tried it will bear me out. But there's just one precaution I'd like to make: Even though it is a soil amendment, lime does not take the place of fertilizer.

JONES

And thank you very much, R. H. Morrish and Jim Rudy, for these timely and helpful suggestions about the use of liming in land management. And now I want to tell a story. And I want to thank C. A. Lewis, extension editor of the University of Kentucky, for it.

One day, Frank Melton, county agent of Larue County, Kentucky, saw a field in which the timothy was taller and greener at one end than anywhere else. It was so noticeable that he stopped to investigate. And here's what T. P. Thurman, the owner, told him: "Yes, that's lime--lime applied accidentally 50 years ago when an old log house was torn down. There was lime mortar between the logs, and it was scattered about this part of the field, and it's still doing business after half a century."

SOUND: Thunder, followed by rain...



ANNOUNCER

If you would like a copy of the bulletin on legumes, drop a penny postcard or a letter to Soil Conservation, Dayton, Ohio. Next week, Wildlife Conservation...

SOUND: Up on thunder and rain...

ANNOUNCER

Fortunes Washed Away is a studio presentation of the Nation's Station.

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